

Team Meeting #22 Agenda, 3/3/21

- Prototyping
 - Fabricate external housing
 - Small clip for 3D part Ryan asked for
 - PLA Shelf review
 - Begin printing on MarkForged?
 - Machining updates
 - MATLAB Updates
 - Tooltips and sander heads
 - When should our sanding tips arrive?
 - We need to print a part to mate our output shaft from Bill with these tips
 - Electronics
 - Jett will take the prototype today and begin soldering connections together
 - Client Meeting this Friday
 - Anything else?

Team Meeting #22 Minutes, 3/3/21

- Prototyping
 - The external housing is nearly ready to be printed, but Ryan will need to figure out how to split the upper receiver and the handle so that they can be printed on the MarkForged
 - The component shelf was a little too flexible for our liking, so we discussed putting a reinforced top plate over the solenoid shelves to hold the frame square. With reinforcement, we think this will work well.
 - When we assembled components onto the shelf, we noted that the front solenoids were slid forward about 5mm too far. We determined that we could move the spring mount backwards about 4mm, and the solenoid shelves backwards about 2mm together to correct this. Ryan is updating the CAD model this week
 - We printed the clip test component in our meeting today, and picked it up afterwards. We determined that the clip design for the battery door will work
- Machining Updates
 - Lucas is still interested in using the knurl to complete the output shaft grit, and is going to ask Dr. Hiller about it on Friday
- MATLAB Updates
 - Maclean has finished our MATLAB sim, and will update our Snapshot #4 presentation with results
- Tooltips and sander heads
 - After examining the dental sanders, we determined that we could 3D print an adapter piece to mate them with the external output shaft for testing
- Electronics
 - All components have been received, and Jett will begin assembling the circuit
- Client Meeting
 - We plan on updating Dr. Hiller of our progress and asking about the knurling process for the output shaft
- Snapshot #4

- We found out after the meeting today that Snapshot #4 and a portfolio check are due next Tuesday. Team members will work on their own to incorporate their contributions from the engineering release review into poster for Snapshot

- Action Items
 - Ryan will update the CAD design to make room for the solenoids and reinforce the shelf (see meeting notes for details), Lucas will look into knurling our output shaft to create a sanding platform, Jett will work on developing the circuit and printing the parts for the handle, and Maclean will begin working on the team's project portfolio. Every member will develop the Snapshot #4 poster using the slides that they contributed to the engineering release review.